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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,878	12/07/2001	Tommy Lindblad	19378.0019	7977

23517 7590 10/17/2005

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WASHINGTON, DC 20007

EXAMINER	
PHAN, HANH	

ART UNIT	PAPER NUMBER
2638	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/005,878	LINDBLAD, TOMMY	
	Examiner	Art Unit	
	Hanh Phan	2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 07/28/2005.

2. Applicant's election with traverse of Species A directed to claims 1-5 and 7-9 in the reply filed on 07/28/2005 is acknowledged.

The traversal is on the ground(s) that both species A and b relate to a single inventive concept. In particular, both species A and B have in common that at least one electric transceiver module is used instead of an opto-electric transceiver module in an interface device designed to receive opto-electronic transceiver modules. This concept is thus present in both species A, as defined by claims 1-5 and 7-9, and in species B, as defined by claims 10-15 and 17-19. This is not found persuasive because Species A (Figs. 3 and 4) directed to claims 1-5 and 7-9 discloses **a method of connecting a subscriber unit to a fiberoptic communication network via a fiberoptic interface device** adapted to function as an interface device in a coarse wavelength division multiplex system (class 398 and subclass 72). Species B (Fig. 5) directed to claims 10-15 and 17-19 discloses **a method of testing the function of an interface device**, the interface device being designed to function as an interface device in a coarse wavelength division multiplex system and to thereby form an interface device between a subscriber unit and a fiberoptic communication network (class 398 and subclass 9).

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choy et al (US Patent No. 5,825,949) in view of Prior Art Figure 2.

Regarding claim 1, referring to Figures 1, 2 and 3A, Choy teaches a method of connecting a subscriber unit to a fiberoptic communication network via a fiberoptic interface device adapted to function as an interface device in a coarse wavelength division multiplex (CWDM) system, the method comprising:

providing an electric circuit arrangement (i.e., an Emitter Coupled Logic ECL electrical interface (Figs. 2 and 3A),

providing a first receiving section (i.e., laser/receiver card, Fig. 3A) adapted to receive a first opto-electric transceiver module including

a first receiver unit (i.e., i.e., detector 56, Fig. 3A) for receiving optical signals from an optical conduction path, the first receiver unit comprising a first opto-electrical converter for converting the received optical signals to electrical signals, which are adapted to be conducted to said electric circuit arrangement, and

a first transmitter unit (i.e., laser 46, Fig. 3A) for transmitting optical signals

to an optical conduction path, the first transmitter unit comprising a first electro-optical converter for converting electrical signals, received from said electric circuit arrangement, to optical signals before they are transmitted from the transmitter unit,

providing a second receiving section (i.e., input/output card, Fig. 2) adapted to receive a second electric transceiver module including a second receiver unit for receiving signals from an electrical conduction path, and a second transmitter unit for transmitting signals to an conduction path,

wherein said first and second receiving sections are designed such that said first and second opto-electric transceiver modules may be plugged into the respective receiving section and unplugged therefrom, and wherein each of the first and second receiving sections is configured to receive a transceiver module of a standardized size,

arranging said first opto-electric transceiver module in said first receiving section and connecting this first opto-electric transceiver module to said fiberoptic communication network,

providing a first electric transceiver module (i.e., input/out card, Fig. 2) including :

a receiver member (i.e., Rx 34, Fig. 2) arranged for receiving electrical signals from an electrical conduction path and for conducting corresponding electrical signals to said electric circuit arrangement, and

a transmitter member (i.e., Tx 32, Fig. 2) for receiving electrical signals from said electric circuit arrangement and for transmitting corresponding electrical signals to an electrical conduction path, wherein said first electric transceiver module is

also designed such that it may be plugged into one of said receiving sections and unplugged therefrom,

arranging said first electric transceiver module (i.e., input/output card, Fig. 2) in said second receiving section rather than the second opto-electric transceiver module, and

connecting said interface device, via said first electric transceiver module, to said subscriber unit via electrical conduction paths (col. 3, lines 55-67, col. 4, lines 20-49, col. 5, lines 43-67 and col. 6, lines 1-40).

Choy differs from claim 1 in that he fails to teach providing a second receiving section adapted to receive a second opto-electric transceiver module including a second receiver unit for receiving optical signals from an optical conduction path, the second receiver unit comprising a second opto-electrical converter for converting the received optical signals to electrical signals, which are adapted to be conducted to said electric circuit arrangement, and a second transmitter unit for transmitting optical signals to an optical conduction path, the second transmitter unit comprising a second electro-optical converter for converting electrical signals, received from said electric circuit arrangement, to optical signals before they are transmitted from the transmitter unit. However, The Prior Art Figure 2 teaches providing a second receiving section adapted to receive a second opto-electric transceiver module including a second receiver unit for receiving optical signals from an optical conduction path, the second receiver unit comprising a second opto-electrical converter for converting the received optical signals to electrical signals, which are adapted to be conducted to said electric circuit

arrangement, and a second transmitter unit for transmitting optical signals to an optical conduction path, the second transmitter unit comprising a second electro-optical converter for converting electrical signals, received from said electric circuit arrangement, to optical signals before they are transmitted from the transmitter unit. Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the providing a second receiving section adapted to receive a second opto-electric transceiver module including a second receiver unit for receiving optical signals from an optical conduction path, the second receiver unit comprising a second opto-electrical converter for converting the received optical signals to electrical signals, which are adapted to be conducted to said electric circuit arrangement, and a second transmitter unit for transmitting optical signals to an optical conduction path, the second transmitter unit comprising a second electro-optical converter for converting electrical signals, received from said electric circuit arrangement, to optical signals before they are transmitted from the transmitter unit as taught by Prior Art Figure 2 in the system of Choy. One of ordinary skill in the art would have been motivated to do this since Prior Art Figure 2 suggests that using such the providing a second receiving section adapted to receive a second opto-electric transceiver module including a second receiver unit for receiving optical signals from an optical conduction path, the second receiver unit comprising a second opto-electrical converter for converting the received optical signals to electrical signals, which are adapted to be conducted to said electric circuit arrangement, and a second transmitter unit for transmitting optical signals to an optical conduction path, the second transmitter

unit comprising a second electro-optical converter for converting electrical signals, received from said electric circuit arrangement, to optical signals before they are transmitted from the transmitter unit have advantage of allowing providing an optical communication system with high speed and high capacity.

Regarding claim 2, Choy further teaches the first electric transceiver module is configured such that said receiver member is a passive receiver member, which conducts the received electrical signals from the electrical conduction path to said electric circuit arrangement without providing any amplification (see Fig. 2).

Regarding claim 3, Choy further teaches the first electric transceiver module is configured such that said transmitter member is a passive transmitter member, which conducts the received electrical signals from the electric circuit arrangement to the electrical conduction path without providing any amplification (see Fig. 2).

Regarding claim 4, it would have been obvious to obtain an amplification of the received electrical signals from the electrical conduction path before the signals are conducted to the electric circuit arrangement in order to increase the power of the signal to a desired level.

Regarding claim 5, it would have been obvious to obtain an amplification of the received electrical signals from the electric circuit arrangement before the signals are conducted to the electrical conduction path in order to increase the power of the signal to a desired level.

Regarding claim 7, Choy further teaches the first opto-electric transceiver module is connected to the fiberoptic communication network via a multiplexer/demultiplexer (i.e., grating 24a, Fig. 1).

Regarding claim 8, Choy further teaches the interface device, together with said attached first opto-electric transceiver module and said attached first electric transceiver module, is arranged to adapt the signals from said subscriber unit before transmitting the signals to the multiplexer/demultiplexer, and also to adapt signals from the multiplexer/demultiplexer before they are transmitted to said subscriber unit (see Fig. 1).

Regarding claim 9, Choy further teaches the interface device includes a circuit board, on which said electric circuit arrangement, said first receiving section and said second receiving section are arranged (see Figs 1, 2 and 3A).

Response to Arguments

5. Applicant's arguments with respect to claims 1-5 and 7-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone

number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

HANH PHAN
PRIMARY EXAMINER

Approved HP 10/14/05

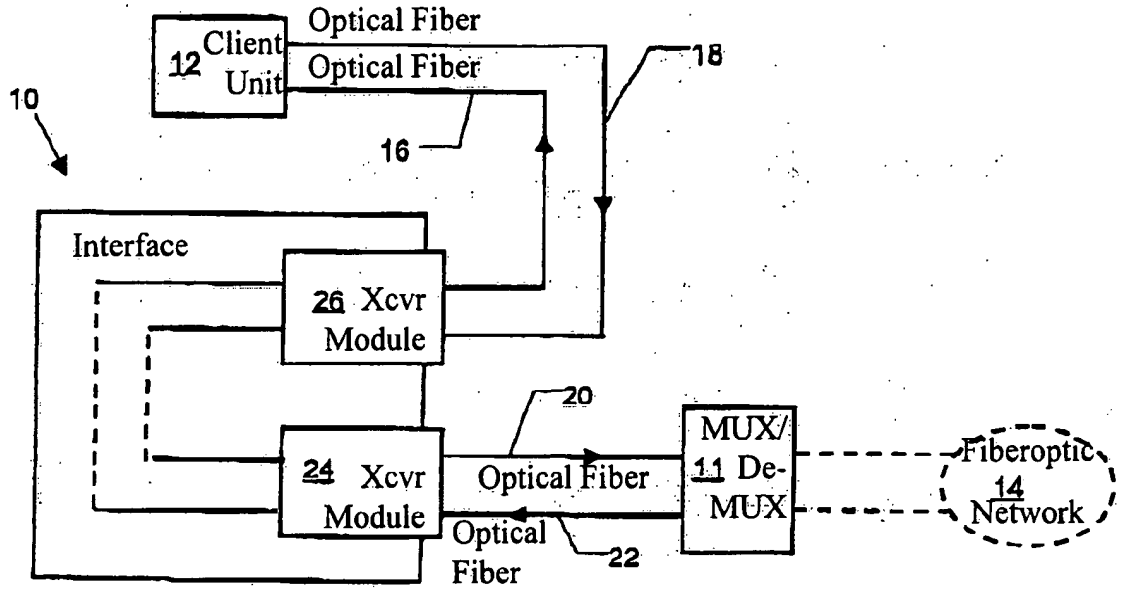

FIG 1 PRIOR ART

Replacement Sheet

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10/14/05

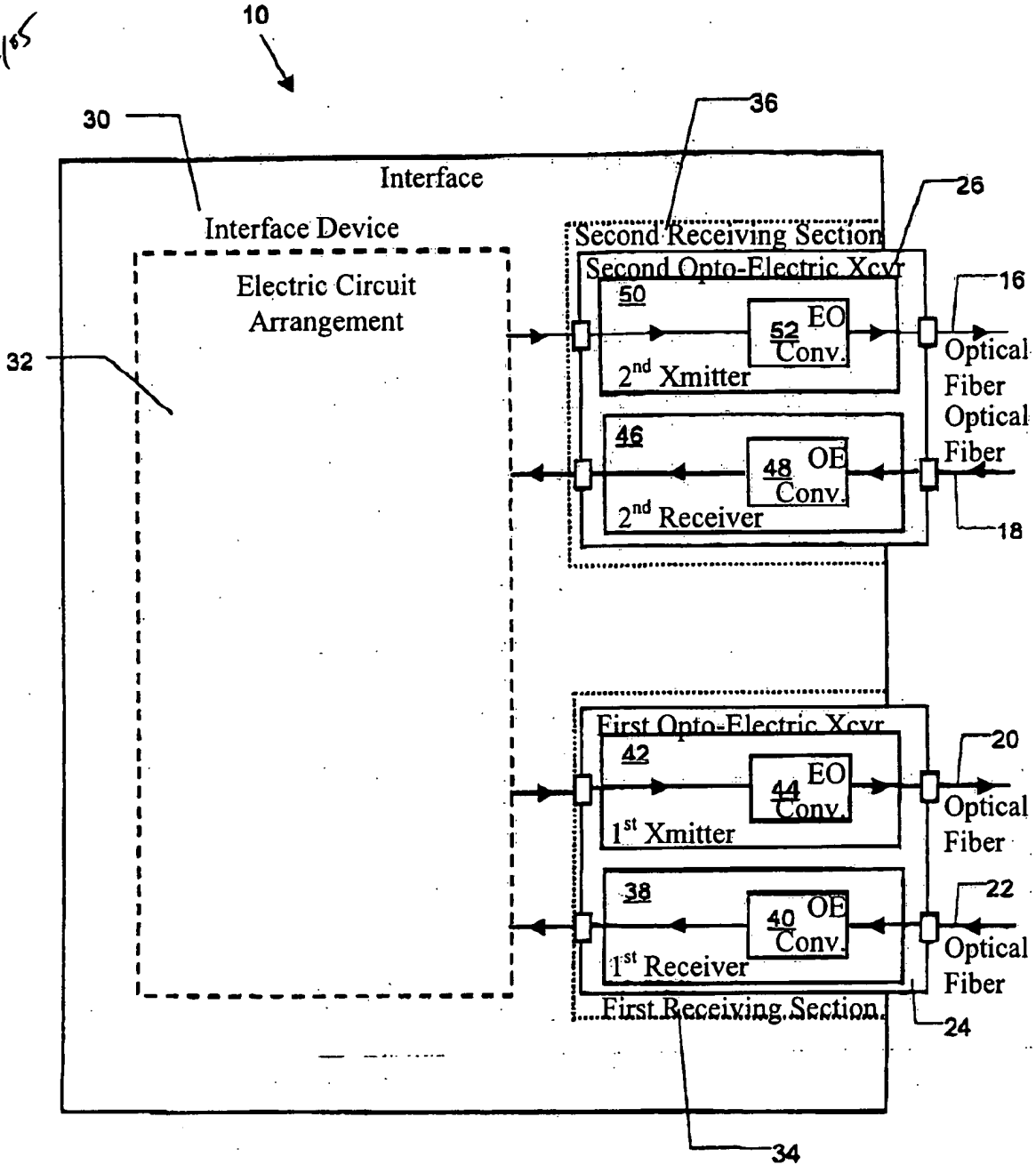

FIG 2 PRIOR ART

Replacement Sheet

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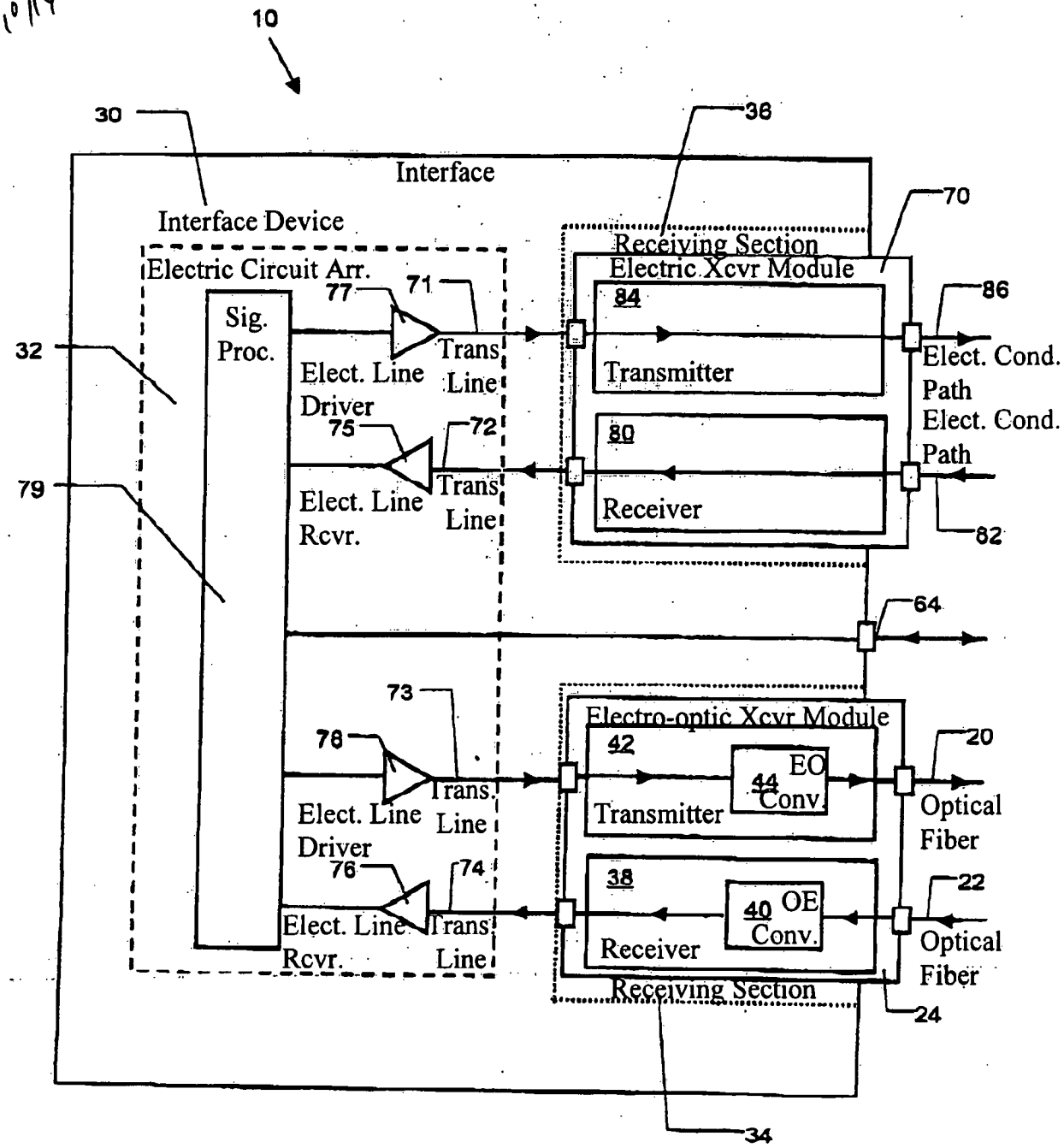

FIG 3

Replacement Sheet

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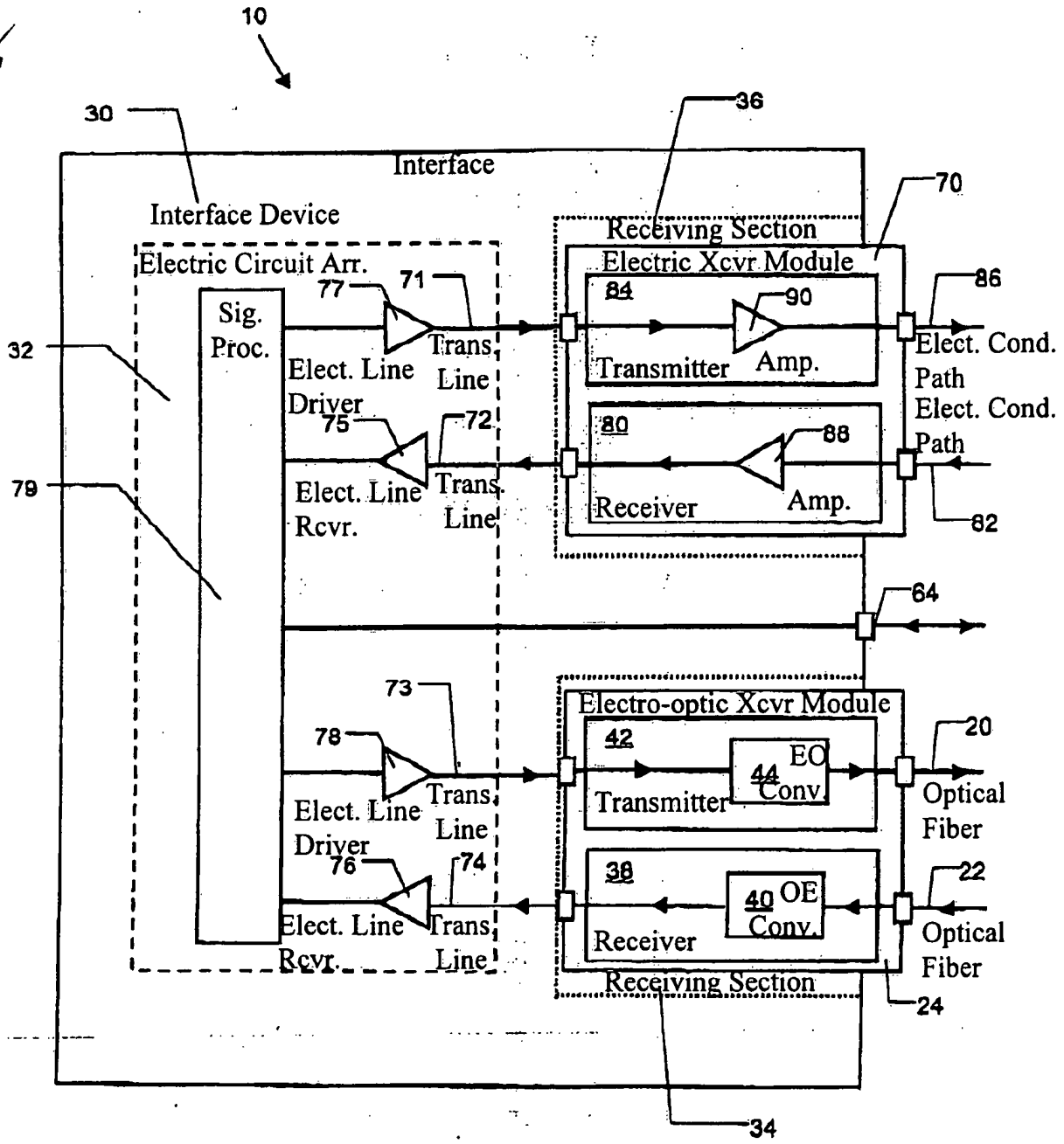

FIG 4

Replacement Sheet

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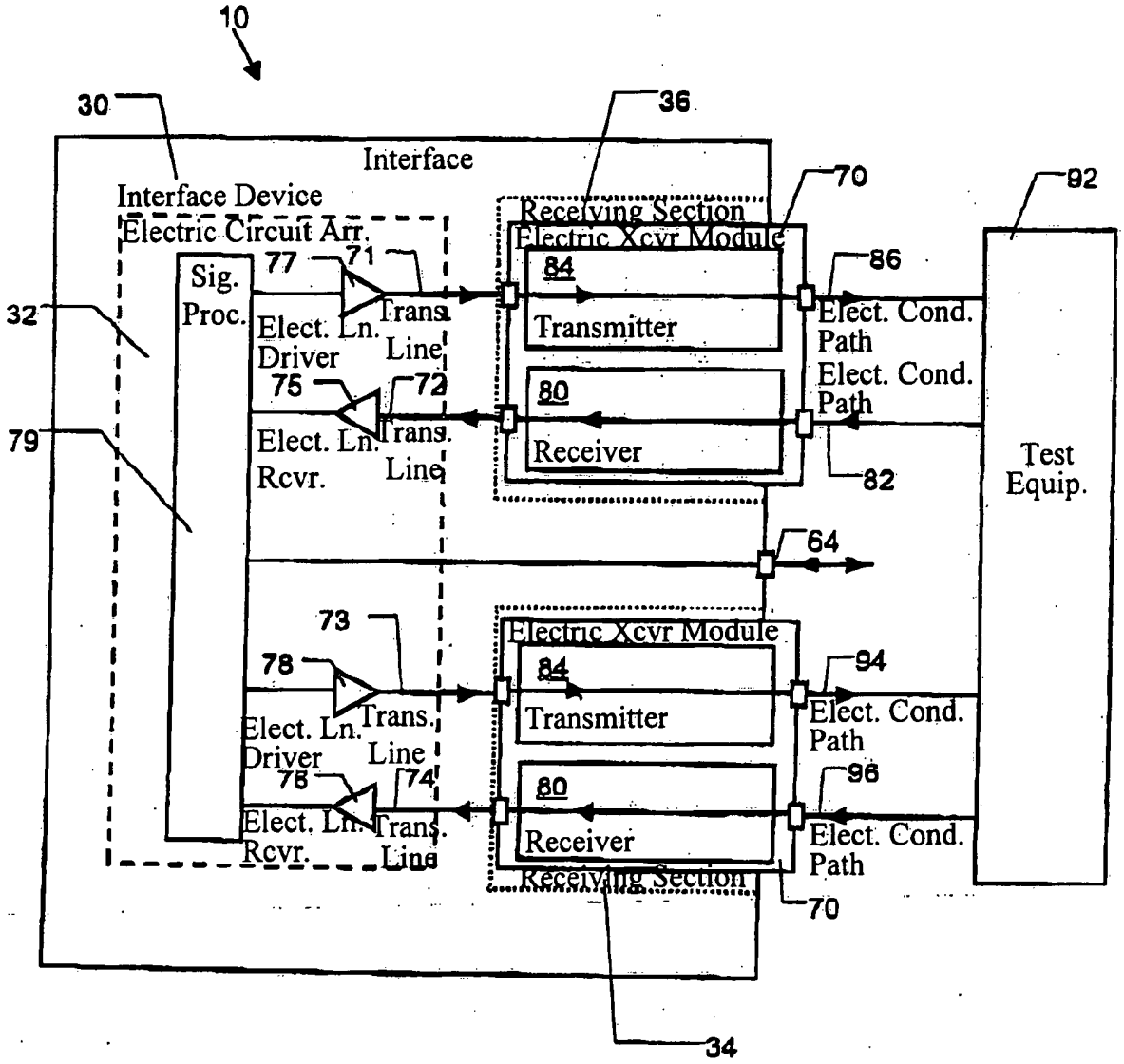

FIG 5